

ABSTRACT OF THE DISCLOSURE

One object of the invention is to provide an electrode composition that prevents capacity decreases that occurs when BF-based salts are used and a lithium secondary battery, and another object is to provide a lithium secondary battery having high discharge capacity even at low temperature with no risk of swelling even during storage. These objects are attained by the provision of an electrode composition containing a lithium fluoroborate-based salt in an electrolyte, wherein a poly(vinylidene fluoride) homopolymer is contained at least as a binder and a lactone is contained as an electrolyte solvent while the poly(vinylidene fluoride) homopolymer has been obtained by a emulsion polymerization process, and a lithium secondary battery using the same.